

Retirement Security in Modern Times

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Overview

The recent recession has amplified widespread public focus on retirement security. Employees are concerned about their ability to meet retirement goals and employers are concerned about being able to meet pension obligations.

This paper provides an analysis of problems and potential solutions surrounding retirement security.

Specifically, this paper:

- Identifies and defines the three pillars of U.S. retirement
- Discusses employee reliance on Social Security
- Discusses employee apprehension about retirement security
- · Discusses research on public plan changes
- Reviews and discusses six pension plan characteristics that contribute to defined benefit plan security

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Three pillars of U.S. retirement

America's framework for providing retirement security is often referred to as a "three-legged stool:" Social Security, private pensions, and personal savings. Each "leg" is an important part of securing employees' retirement.



As a result of the 2008 recession, Prudential proposed a new concept it calls the "four pillars" of U.S. retirement. These pillars include the original "three-legged stool" as well as "retirement choices." Retirement choices include both lifestyle and financial choices.

Well-designed pension plans can ensure the stability and continuation of the three-legged framework and allow employees the ability to manage lifestyle and financial choices to meet their retirement goals.

Lifestyle choices include:

- When to start retirement
- Whether to work in retirement
- Where to live

Financial choices include:

- How to allocate assets in retirement
- · How to convert assets to income
- How to protect assets and income

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Employee reliance on Social Security

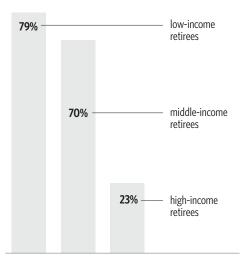
Retirees in the United States rely heavily on Social Security. An October 2011 paper by Nari Rhee et al. examined Social Security coverage in California and its proportionate contribution to retirement income. The authors found that Social Security forms the bedrock of retirement income for the vast majority of retirees in California.

Employer-sponsored retirement plans make up the second most important source of income. Low- and middle-income retirees rely overwhelmingly on the single pillar of Social Security, in contrast to upper-income retirees who have a variety of income sources.

Rhee et al. found that Social Security is 79 percent of the retirement income for those in the bottom 25 percent, and 70 percent of retirement income for those in the middle 50 percent. In contrast, Social Security is only 23 percent of the retirement income for those in the top 25 percent. Without employersponsored pension plans Social Security is the primary, if not the only, retirement income source for the most vulnerable retirees.

In April of 2012, the Social Security Board of Trustees reported that the combined assets of the Old-Age, Survivors, and Disability Insurance (OASDI) Trust Funds will be exhausted in 2033, three years earlier than they projected in 2011.

Retirees' reliance on Social Security



Percentage of retirement income from Social Security by income group

Social Security forms the bedrock of retirement income for the vast majority of retirees in California.

Employee apprehension

Retirement plan security is a concern to employees. A September 2010 Towers Watson survey of private sector employees on "retirement attitudes" found this to be true for younger employees. The survey found that 45 percent of employees under age 40 are concerned that their employer will be unable to pay some of the benefits they have already earned. Similarly, 43 percent of employees under age 40 said they were concerned that their employer will be at risk financially as a result of the employer's pension obligations.

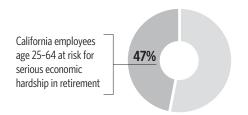
The Towers Watson survey found that employees value their employer's retirement plan offerings. For example, 25 percent of employees cited their employer's retirement program offering as an important factor in their decision to work for their current employer. Similarly, 41 percent cited the retirement program as an important factor in their decision to stay with their employer.

These findings are even more pronounced for younger employees in the wake of the recession. Young employees find defined benefit (DB) plans a growing incentive to join or continue working for an organization. Defined contribution (DC) plans do not provide the same level of incentive. The table below highlights the survey findings from year to year for employees younger than 40 on two key questions:

	Defined Benefit		Defined Contribution	
My company's retirement program	2009	2010	2009	2010
was an important reason I decided to work for my employer.	28%	43%	19%	17%
is an important reason I will stay with my current employer.	37%	63%	29%	26%

The October 2011 paper by Nari Rhee et al. validated employees' concerns. They found that 47 percent of California employees age 25-64 are at risk for serious economic hardship in retirement. Fifty-five percent of young employees (age 25-44) risk having incomes below 200 percent of the poverty threshold if they retire at age 65. Nari Rhee et al. used census data on

Economic hardship risk in retirement



worker assets and the resulting projected annuity in retirement, as well as availability of a DB pension plan and Social Security benefits to estimate retirement income. To account for geographical variations, the authors used 200 percent of the federal poverty level as the threshold to determine the number of retirees in California who will face significant economic hardship and have difficulty meeting basic expenses.

Defined benefit public pension plans are in a unique position to help ease employee retirement fears, attract employees, and encourage workforce stability.

A 2011 survey by the National Institute on Retirement Security (NIRS) found that 34 percent of Americans define a secure retirement as simply surviving or living comfortably. The survey also found that 84 percent of Americans are "concerned" that current economic conditions are impacting their ability to achieve a secure retirement and 54 percent are "very concerned."

Defined benefit public pension plans are in a unique position to help ease employee retirement fears, attract employees, and encourage workforce stability. By instituting characteristics of well-funded pension plans, public entities can mitigate some risks associated with a sustainable defined benefit pension plan.

Employer adjustments

Due to the economy and concerns about plan funding volatility, many employers have taken measures to mitigate risk, supporting their ability to pay benefits long-term. According to a joint 2011 National Association of State Retirement Administrators and National Council on Teacher Retirement issue brief, "In the past few years, nearly two-thirds of states have made changes to pension benefit levels, contribution rate structures, or both to improve the longterm sustainability of their retirement plans." The brief goes on to quote the National Conference of State Legislatures as stating that 20 states made such changes in 2010 alone.

CalPERS has experienced an increase in employer plan adjustments since the beginning of the recession in 2008. The table below highlights types of changes by plan category before and after the recession:

Types of changes by plan category	Miscellane	eous Plans	Safety Plans	
	2005-07	2010 – 12	2005-07	2010 – 12
Lower benefit formula only	6	68	6	43
Lower final compensation only (change from 1- to 3-year final average)	1	6	1	2
Lower benefit formula & lower final compensation	3	51	0	41

Benefit plan security characteristics

According to their 2011 report, "Lessons from Well-Funded Public Pensions: An Analysis of Six Plans that Weathered the Financial Storm," NIRS found that while the financial crisis lowered the funded levels of most public pension plans, several plans were able to maintain a well-funded status.

NIRS identified six well-funded statewide public pension systems that met the following funding threshold criteria:

- A funding ratio above 80 percent based on the actuarial value of assets as of the end of Fiscal Year 2009, and
- A funding ratio above 70 percent based on the market value of assets as of the end of Fiscal Year 2009

Based on the criteria above, NIRS selected the following public pension plans for analysis:

- Delaware State Employees' Pension Plan
- Idaho Public Employee Retirement Fund
- · Illinois Municipal Retirement Fund
- New York State Teachers' Retirement System
- North Carolina Teachers' & State Employees' Retirement System
- Teacher Retirement System of Texas

NIRS found six characteristics that contributed to these public pension funds' ability to weather the economic downturn:

- Continual contributions at least equal to normal cost
- Employee contributions that help share in the cost of the plan
- Properly funded benefit improvements
- Responsible cost-of-living adjustments (COLAs)
- Appropriate anti-spiking measures
- Achievable economic actuarial assumptions

Continual contributions

NIRS concludes that the most fundamental characteristic to achieve a 100 percent funding ratio is ensuring that plan sponsors pay the entire amount of the annual required contribution (ARC) each year, because anything short of a full payment has a negative impact on the plan's long-term funding ratio.

There are multiple options available to ensure that contribution rates remain adequate and stable in the future, such as requiring a full annual ARC payment. For example, the Idaho Public Employee Retirement Fund code provides that the Board of Administration cannot establish a contribution rate below the normal cost plus the minimum amortization payment required to fund the Unfunded Actuarial Liability (UAL) within 25 years.

Shared costs

Unlike the employer contribution rate, the employee contribution rate is typically set in state statute and does not change annually. Plans differ, however, on the employee contribution level.

NIRS suggests that plans establish a form of "adjustable" employee contribution rate, or establish a "relatively" fixed employee rate that pays for a specific portion of the long-term expected pension cost.

A "relatively" fixed employee rate includes two components: a set portion of the normal cost, plus an additional rate for volatility that can lead to an increase in the unfunded accrued liability.

As an example of an "adjustable" contribution rate, in the Idaho Public Employee Retirement System, employee contributions are set as a percentage of the employer contribution rate. Therefore, the employee rate "adjusts" with employer contribution rates.

Properly funded benefit improvements

NIRS notes that employers may find that periodically updating benefit design is consistent with achieving their human resource management objectives and addressing budgetary constraints. For changes to be consistent with the long-term health of the pension system, the cost (or savings) associated with the changes must be integrated with the plan's funding policy.

The 2008 Government Finance Officers Association best practice brief, "Essential Design Elements of Defined Benefit Retirement Plans," recommends that all benefit enhancements be actuarially valued before they are adopted.

California statute requires that an actuarial valuation be done for any benefit improvement and that an actuary be present at the governing board meeting where benefits improvements are adopted.

The Teacher Retirement System of Texas is an example of a system that provided a benefit increase in 2001 and had a funding ratio of 82.7 percent as of August 31, 2011, suggesting it has weathered the recent recession. The retirement calculation multiplier increased from 2.2 to 2.3 percent effective September 1, 2001. The arguments supporting this change in 2001 included: "The multiplier increase would come from within the system, with no increase in member or state contributions. Thus, teachers would receive greater retirement monthly payments within an actuarially sound retirement system." The increased multiplier was on a prospective basis, surplus funded, and remains in effect. In 2001 the Teacher Retirement System of Texas was over 102 percent funded.

Responsible cost-of-living adjustments

NIRS proposes that COLAs be designed to maintain balance between providing inflation protection to retirees and keeping costs affordable. One critical plan design feature of COLAs is whether they are automatic or ad-hoc. An automatic COLA is one that does not require specific approval or action by the plan sponsor (employer). Conversely, ad-hoc COLAs require specific action and approval by the plan sponsor (employer).

Most of the examples of well-funded systems cited by NIRS use ad-hoc COLAs. Most of these COLAs are based on the Consumer Price Index (CPI). Ad-hoc COLAs allow employers flexibility to adapt to economic conditions.

Anti-spiking measures

Pension "spiking" refers to increasing pension benefits by augmenting the final average salary (FAS) beyond what is expected from normal salary increases. This can happen when the FAS includes unusually large overtime payments, unused sick leave or vacation time, or a largerthan-normal salary increase in the final years of employment. NIRS notes that although pension spiking is not common, a few isolated cases can create the impression of widespread abuse.

Defined benefit pension plans use a variety of methods to protect against pension spiking. Many use the average salary over multiple years to arrive at the FAS and many plans exclude overtime pay or unused sick or vacation pay in FAS calculations.

All of the well-funded plans identified by NIRS have FAS periods of three years or more. Most also have specific rules about what to exclude from those calculations, such as unused sick leave.

Achievable economic actuarial assumptions

As NIRS points out, funding policies and investment policies are intertwined, contributions are invested in financial markets, and the corresponding investment earnings help finance benefits. Two significant economic assumptions are the investment rate-of-return and the inflation rate.

The investment rate-of-return assumptions for the well-funded systems studied by NIRS are between 7.25 and 8 percent, which are more conservative than their actual long-term rates-ofreturn. As of 2009, all of their 25-year average investment rates-of-return were above 9 percent.

In a 2011 issue brief, the National Association of State Retirement Administrators (NASRA) found that since Fiscal Year 2008, 19 of the 126 plans in its Public Fund Survey reduced their investment return assumption. NASRA also concluded that actuarial assumptions should focus on long timeframes. Therefore, compared to actual results, public pension plan investment return assumptions are conservative.

Conclusion

In today's uncertain economic environment, employees are concerned about their ability to sustain a basic level of income during retirement. Social Security provides the largest portion of retirement income for retirees in the bottom- and middle-income ranges. Through pensions, public employers have a unique opportunity to attract and maintain a stable workforce. While employers are concerned about their ability to meet pension obligations, they can mitigate that risk by instituting policies that lead to pension plan soundness:

- Continual contributions at least equal to normal cost
- Employee contributions that help share in the cost of the plan
- Properly funded benefit improvements
- Responsible COLAs
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This literature review leads to several interesting questions for future research:

- Are the concrete factors identified of the same importance to all systems, or do specific design features matter more based on the size of the plan or the demographic make-up of the plan?
- What is the impact of the "baby boomer exodus" on public pension plans?

While employers are concerned about their ability to meet pension obligations, they can mitigate that risk by instituting policies that lead to pension plan soundness.

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